<div align="center">REMARKS</div>

Claims 1, 2, 8, 10, 27 and 30-33 are currently pending in the subject application and are presently under consideration. Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

**I.    Rejection of Claims 1, 2, 8, 10, 27 and 30-33 Under 35 U.S.C. §101**

Claims 1, 2, 8, 10, 27 and 30-33 stand rejected under 35 U.S.C. §101 because the Examiner contends that the claimed invention is directed to non-statutory subject matter. Applicants' representative respectfully submits that the claims as submitted prior to this amendment encompass patentable subject matter. (*See e.g.*, *Eolas Technologies, Inc. v. Microsoft Corp.*, 399 F.3d 1325, 1339 (Fed. Cir. 2005)). However, in order to expedite prosecution, the claims have been amended. Withdrawal of this rejection is respectfully requested.

**II.   Rejection of Claims 8, 10, 32 and 33 Under 35 U.S.C. §102(e)**

Claims 8, 10, 32 and 33 stand rejected under 35 U.S.C. §102(e) as being anticipated by Vandersluis (US Patent 6,356,920). Withdrawal of this rejection is respectfully requested for at least the following reasons. Vandersluis does not disclose *both* a hierarchical (XML data document component) and relational representation (data set component) of an XML source document or a system that facilitates accessing and *changing information in the XML data document component and reflecting these changes in the data set component according to a mapping between the XML data document component and the data set component*.

> A single prior art reference anticipates a patent claim only if it expressly or inherently describes *each and every limitation* set forth in the patent claim. *Trintec Industries, Inc. v. Top-U.S.A. Corp.,* 295 F.3d 1292, 63 USPQ2d 1597 (Fed. Cir. 2002); *See Verdegaal Bros. v. Union Oil Co. of California,* 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The *identical invention must be shown in as complete detail as is contained in the … claim*. *Richardson v. Suzuki Motor Co.,* 868 F.2d 1226, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989) (emphasis added).

The subject application describes systems and methods for providing unified access to structured (*e.g.,* relational) and unstructured (*e.g.,* hierarchical) data. (*See* Application at p. 4). Data in a source document is parsed into *both* hierarchical and relational representations so that information contained in the source document can be accessed as structured data (*e.g.,* relational representation) and/or as unstructured data (*e.g.,* hierarchical representation) as shown in Fig. 1 of the subject application reproduced below. (*See* Application at pp. 4-5).

```
                                                      ┌─ 140
  ┌────────────────────┐         ┌────────────────────┐
  │   DATA DOCUMENT    │◄──130   │     DATA SET       │
  │    COMPONENT       │◄──────► │    COMPONENT       │
  └────────────────────┘         └────────────────────┘


  ┌────────────────────┐   ┌─ 120
  │       PARSER       │
  └────────────────────┘

       ┌──────────┐   ┌─ 110
       │  SOURCE  │
       │ DOCUMENT │
       └──────────┘
```
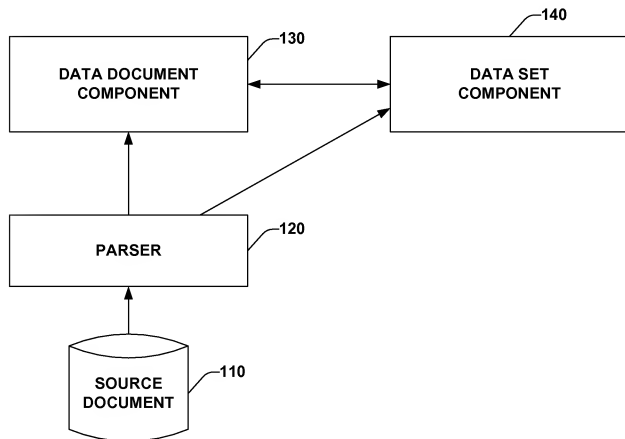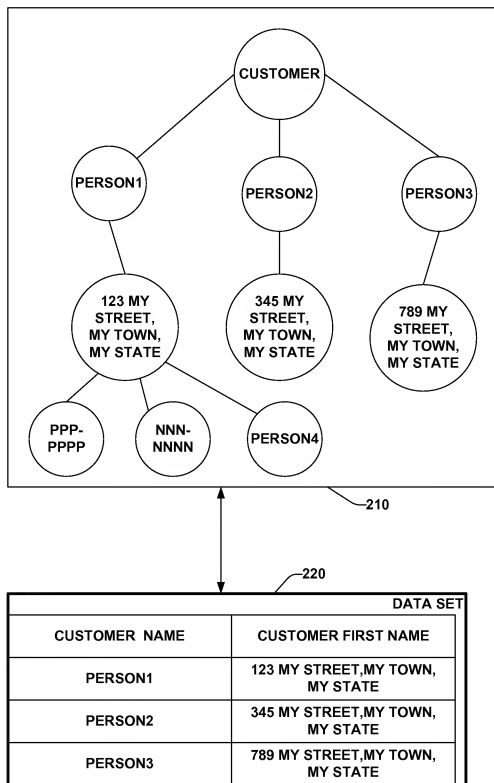
Fig. 2 of the subject application reproduced below shows an example of a hierarchical representation 210 and a relational representation 220 of the source document data.

| DATA SET | |
|---|---|
| CUSTOMER NAME | CUSTOMER FIRST NAME |
| PERSON1 | 123 MY STREET,MY TOWN, MY STATE |
| PERSON2 | 345 MY STREET,MY TOWN, MY STATE |
| PERSON3 | 789 MY STREET,MY TOWN, MY STATE |

The hierarchical representation and the relational representation are synchronized, so that change(s) made to the data in one representation can be reflected in the other representation. (*See* Application at pp. 4-5).

Claim 8 recites the limitations an XML data document component having *a hierarchical representation* of information associated with *an XML source document* and a data set component having *a relational representation* of at least some of the information associated with *the XML source document*, wherein the system facilitates accessing and *changing information in the XML data document component and reflecting these changes in the data set component according to a mapping between the XML data document component and the data set component*. Vandersluis does not disclose these novel features of the subject claim. Vandersluis discloses a Hierarchical Data Server (HDS) 201 as shown in Fig. 15 of Vandersluis reproduced below. (*See* Vandersluis at col. 5, lines 56-57).
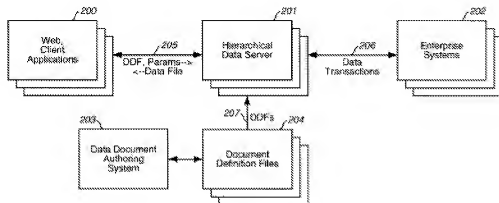


**FIG. 15**

When a client 200 needs data from enterprise systems 202, it sends a request to the HDS indicating the Document Definition File (DDF) 204 that specifies the data to be retrieved. (*See* Vandersluis at col. 5, line 66-col. 6, line 1, col. 7, lines 14-26 and Fig. 16). Upon receiving a client request, the HDS processes all of the elements in the DDF and returns a Data File to the client. (*See* Vandersluis at col. 5, lines 53-55; col. 7, 3-10; and col. 8, lines 43-52). A DDF is created by a human using the Document Definition Authoring System 203. (*See* Vandersluis at col. 5, lines 45-51, col. 10, line 30 through col. 11, line 40 and Figs. 4(a)-(b)). In the preferred

embodiment of Vandersluis, both the DDF and the Data File returned to the client are *XML documents*. (*See* Vandersluis at col. 11, lines 40-55).

The Examiner contends that Vandersluis discloses a data set component having a relational representation of at least some of the information associated with the XML source document at the Abstract, lines 16-21 and Figs. 4a-b and associated text. (*See* Final Office Action dated May 1, 2006 at p. 4). Lines 16-21of the Abstract read as follows:

> [d]ata elements may be derived from a plurality of sources, and these sources may be combined and manipulated using a plurality of data operations, including relational algebra or structured query language, enabling joins and merges between multiple sources and formats. An Authoring System is provided which assists in the construction and validation of DDFs.

(Vandersluis at Abstract). That section of the Abstract merely states that data may be obtained from a plurality of sources/formats and manipulated. It does not disclose a data set component having a relational representation of at least some of the information associated with the XML source document. Figs. 4a-b reproduced below show the user interface for the Data Document Authoring System.
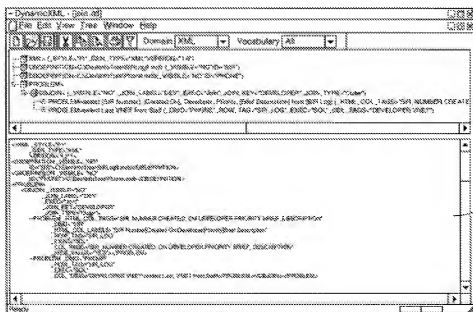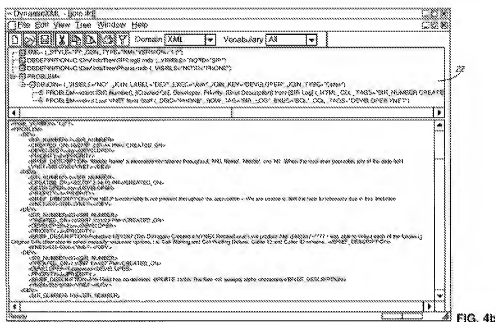


**FIG. 4a**

FIG. 4b

The Document Definition Authoring System is described as a piece of software that assists in the creation and editing of a DDF, which is a hierarchical document as shown in Fig. 16 of Vandersluis reproduced below, not a relational representation of an XML source document. (*See* Vandersluis at Abstract, col. 6, lines 65-67, col. 7, lines 14-44, col. 11, lines 40-55 and Fig. 16).



FIG. 16
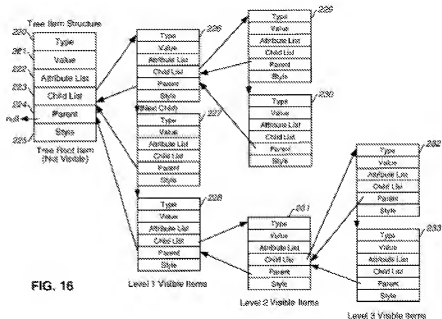
The Examiner also contends that Vandersluis discloses a system that facilitates accessing and changing information in an XML data document component and reflecting these changes in a data set component according to a mapping between the XML data document component and the data set component at Figs. 7 and 14 and associated text.  (*See* Final Office Action dated May 1, 2006 at p. 4).  Fig. 7 of Vandersluis is a flowchart of the processing steps taken by the HDS to process an element of the DDF.  (*See* Vandersluis at col. 6, lines 34-35).  It does not show changing information in a hierarchical representation of an XML source document and reflecting these changes in a relational representation of the XML source document according to a mapping.  Fig. 14 of Vandersluis shows C++ code for performing parameter substitution.  (*See* Vandersluis at col. 6, lines 57-60 and col. 7, lines 29-47).  It does not show changing information in a hierarchical representation of an XML source document and reflecting these changes in a relational representation of the XML source document according to a mapping.  In view of at least the foregoing, applicants' representative respectfully requests that this rejection be withdrawn.

**III.     Rejection of Claims 1, 2, 27, 30 and 31 Under 35 U.S.C. §103(a)**

Claims 1, 2, 27, 30 and 31 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Vandersluis (US Patent 6,356,920) in view of Ludwig (US Patent Pub. No. 2002/0198798).  Withdrawal of this rejection is respectfully requested for at least the following reasons.  Neither Vandersluis nor Ludwig, either alone or in combination, teach or suggest all of the claim limitations.

> The test of obviousness is whether "the subject matter sought to be patented and the prior art are such that the subject matter as a *whole* would have been obvious at the time the invention was made to a person having ordinary skill in the art." (*Graham v. John Deere Co.*, 383 U.S. 1, 3 (1966) (emphasis added); *see also e.g.*, *In re Dembiczak*, 175 F.3d 994, 998, 50 U.S.P.Q. 1614, 1616 (Fed. Cir. 1999)).  In evaluating obviousness, the PTO must conduct the factual inquiry as outlined in *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966).  (*See In re Lee*, 277 F.3d 1338, 1342-43, 61 U.S.P.Q.2d 1430, 1433 (Fed. Cir. 2002)).  The factual inquiry to be conducted includes determining: (1) the scope and content of the prior art; (2) the level of ordinary skill in the prior art; (3) the differences between the claimed invention and the prior art; and (4) objective evidence of nonobviousness.  (*See Graham*,

383 U.S. 1, 17-18 (1966)). The PTO must "not only assure that the requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the agency's conclusion." (*In re Lee*, 277 F.3d at 1344, 61 U.S.P.Q.2d at 1434). The PTO cannot rely merely on conclusory statements and assertions of "common sense" to remedy deficiencies of the cited references. (*In re Lee*, 277 F.3d at 1344, 61 U.S.P.Q.2d at 1434). If the PTO relies on multiple prior art references as the basis for an obviousness rejection, it is not enough that all of the claim limitations appear in the prior art. To establish a *prima facie* case of obviousness, the PTO must also make an adequate showing of a suggestion, teaching, or motivation to combine the prior art references. (*See In re Dembiczak*, 175 F.3d 994, 999-1001, 50 U.S.P.Q. 1614, 1617 (Fed. Cir. 1999) (citing to *C.R. Bard, Inc., v. M3 Systems, Inc.*, 157 F.3d 1340, 1352, 48 U.S.P.Q.2d 1225, 1232 (Fed. Cir. 1998)); *see also In re Lee*, 277 F.3d at 1343, 61 U.S.P.Q.2d at 1433). Only if the PTO establishes a *prima facie* case of obviousness does the burden of coming forward with evidence or argument shift to the applicant. (*See In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1445 (Fed. Cir. 1992)).

Claim 1 recites the limitations a data document component having *a hierarchical representation* of at least a portion of information associated with the *data source*, and a data set component having *a relational representation* of at least a portion of information associated with the *data source*, the data set component and the data document component being mapped to each other to facilitate accessing the information in either representation, *changing the information in the representation accessed and synchronizing these changes in the other representation*. Claim 27 recites the limitations a component to facilitate *synchronizing one or more changes made to relationally represented source document information mapped to a hierarchically represented source document information.* As explained above Vandersluis does not teach or suggest these novel features of the subject claims. Ludwig does not remedy the deficiencies of Vandersluis.

Ludwig discloses a network-based system and method for billing and payment. (*See* Ludwig at para. 0001). The Examiner contends that Ludwig discloses synchronizing changes in a hierarchical or relational representation of a data source with the other representation at Fig. 5 and associated text, specifically paragraph 0058. (*See* Final Office Action dated May 1, 2006 at

p. 6). Fig. 5 of Ludwig is a flowchart showing the steps performed by the server when a user

logs into the server to pay a bill. (*See* Ludwig at para. 0054). Paragraph 0058 states:

> [t]he system may permit a host user to select an option to edit
> biller websites and logos, directing the user to a biller website and
> logo page 511. The system may display a list of billers, and upon
> selection of a biller from the list, the system may populate the
> company information area with details about the current biller. For
> each biller, the system may permit a list of company logos and
> websites to be edited. The system may make new logos available
> to the system with an "add" button which uploads the logo file,
> and may likewise permit logos to be removed from the system
> with a "remove" button. The system may display a list of websites
> via a listbox containing the sites and a site details edit area. Upon
> selection of a website in the list, the system may populate the site
> details section. The system may permit the URL, description, and
> type of website to be edited. The system may provide a delete
> button for removing a site from the list. The system may provide a
> save button to save the current website. The system may provide a
> new site button for emptying the edit area to allow a new site to be
> entered and saved. The system may provide selectable links for
> accessing the biller's enrollment page and biller profile page. The
> system may be adapted to store logo and website data as global
> information on the database.

(Ludwig at para. 0058). As is readily apparent, paragraph 0058 of Ludwig merely discloses a

mechanism by which a user may edit biller web sites and logos. In view of at least the

foregoing, applicants' representative respectfully requests that this rejection be withdrawn.

## CONCLUSION

The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [MSFTP250US].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number below.

Respectfully submitted,

AMIN, TUROCY & CALVIN, LLP

   /Cheryl L. Young/
Cheryl L. Young
Reg. No. 43,298

AMIN, TUROCY & CALVIN, LLP
24TH Floor, National City Center
1900 E. 9TH Street
Cleveland, Ohio 44114
Telephone (216) 696-8730
Facsimile (216) 696-8731